

In the Claims

1-11 (Canceled)

12. (Original) A method for manufacturing an electrical cable, comprising:

(a) extruding an elastomeric jacket over at least one insulated conductor;

(b) rolling a metal plate around the jacket to form a cylindrical tubing having a seam;

then

(c) welding the seam; then

(d) swaging the tubing to a lesser diameter wherein an inner wall of the tubing frictionally grips the jacket.

13. (Original) The method according to claim 12, wherein step (b) comprises forming the cylindrical tubing with an initial inner diameter a selected amount greater than an outer diameter of the jacket.

14. (Original) The method according to claim 12, wherein step(b) comprises forming the cylindrical tubing with an initial inner diameter at least .030 inch greater than an outer diameter of the jacket.

15. (Currently Amended) The method according to claim 12 wherein step (a) comprises forming the jacket with an ~~EPDM~~ ethylenepropylenediene monomer material.

16. (Original) The method according to claim 12, wherein step (b) comprises forming the plate of stainless steel.

17. (Original) The method according to claim 12 wherein:

step (a) comprises forming a longitudinal recess in the jacket; and

step (b) comprises aligning the seam with the recess.

18. (Currently Amended) A method for manufacturing a heater cable for a well, comprising:

(a) continuously extruding a jacket over a plurality of insulated conductors, and providing the jacket with a cylindrical exterior having a plurality of longitudinally extending grooves ~~and a longitudinally extending recess formed thereon;~~

(b) continuously rolling a ~~stainless steel~~ metal plate around the jacket to form a cylindrical tubing having a seam ~~that is positioned over the recess in the jacket, and providing the tubing with an initial inner diameter that is greater than an outer diameter of the jacket;~~

(c) welding the seam; then

(d) swaging the tubing to a lesser diameter, wherein an inner wall of the tubing frictionally grips the jacket.

19. (Original) The method according to claim 18, further comprising cutting the tubing, the jacket and the insulated conductors at a desired length to form a lower end of the cable, then joining the conductors electrically to each other at the lower end.

20. (Currently Amended) The method according to claim 18, wherein step (d) comprises swaging the tubing to an outer diameter that is ~~in a range from 0.75 inch to~~ less than 1.00 inch.

21. (Currently Amended) A method for applying heat to a well ~~having a production tubing suspended within casing, defining a tubing annulus between the casing and the production tubing, the method~~, comprising:

(a) forming a heater cable by extruding a jacket over a plurality of insulated conductors, rolling a ~~stainless steel~~ metal plate around the jacket to form a cylindrical ~~coiled~~ tubing having a seam ~~and an initial inner diameter that is greater than an outer diameter of the jacket,~~ welding the

seam, then swaging the ~~coiled~~ tubing to a lesser diameter, wherein an inner wall of the ~~coiled~~ tubing frictionally grips the jacket;

(b) electrically joining lower ends of the conductors and deploying the heater cable into the ~~production tubing well~~; and

(c) ~~with a vacuum pump located at the surface of the well, reducing pressure within the tubing annulus to below atmospheric pressure; and~~

~~(d)~~ (c) applying electrical power to the conductors to cause heat to be generated..

22. (Canceled)

23. (Canceled)

24. (New) The method according to claim 18, wherein step (b) comprises forming the cylindrical tubing with an initial inner diameter a selected amount greater than an outer diameter of the jacket.

25. (New) The method according to claim 18, wherein step(b) comprises forming the cylindrical tubing with an initial inner diameter at least .030 inch greater than an outer diameter of the jacket.

26. (New) The method according to claim 18 wherein step (a) comprises forming the jacket with an ethylenepropylenediene monomer material.

27. (New) The method according to claim 18, wherein step (b) comprises forming the plate of stainless steel.

28. (New) The method according to claim 18 wherein:

step (a) comprises forming a longitudinal recess in the jacket; and

step (b) comprises aligning the seam with the recess.

29. (New) The method according to claim 19, further comprising closing the lower end of the tubing after the conductors are electrically joined to seal the interior of the tubing.

30. (New) The method according to claim 19, further comprising insulating the lower ends of the conductors from the tubing, and sealing the tubing from entry of fluids from the exterior into the interior of the tubing.

31. (New) The method according to claim 21, wherein step (b) further comprises closing a lower end of the tubing to prevent entry of well fluids into the interior of the tubing.

32. (New) The method according to claim 21, wherein step (b) further comprises insulating the lower ends of the conductors from the tubing, and sealing the tubing to prevent entry of well fluids into contact with the conductors.

33. (New) The method according to claim 21, wherein step (b) comprises forming the cylindrical tubing with an initial inner diameter a selected amount greater than an outer diameter of the jacket.

34. (New) The method according to claim 21 wherein:

step (a) comprises forming a longitudinal recess in the jacket; and

step (b) comprises aligning the seam with the recess.